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## NOTICE OF ALLOWANCE AND FEE(S) DUE

21658 7590 03/08/2004  
DYKAS, SHAVER & NIPPER, LLP  
P.O. BOX 877  
802 WEST BANNOCK STREET, SUITE 405  
BOISE, ID 83701

EXAMINER

CHAMBERS, TROY

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 03/08/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,999	12/07/2001	George M. Vais	VAIG101	9222

TITLE OF INVENTION: MUZZLE BRAKE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$665	\$300	\$965	06/08/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status.  
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

**CURRENT CORRESPONDENCE ADDRESS** (Note: Legibly mark-up with any corrections or use Block 1)

21658 7590 03/08/2004

**DYKAS, SHAVER & NIPPER, LLP**  
**P.O. BOX 877**  
**802 WEST BANNOCK STREET, SUITE 405**  
**BOISE, ID 83701**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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EXAMINER	ART UNIT	CLASS-SUBCLASS
CHAMBERS, TROY	3641	089-014300

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.**

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TRANSMIT THIS FORM WITH FEE(S)



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EXAMINER CHAMBERS, TROY				
ART UNIT			PAPER NUMBER	
3641				

DATE MAILED: 03/08/2004

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

**Notice of Allowability**

Application No.

10/004,999

Examiner

Troy Chambers

Applicant(s)

VAIS, GEORGE M.

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amend filed 1/29/04.
2. ☒ The allowed claim(s) is/are 1,3,9,10,13,14 and 16.
3. ☒ The drawings filed on 12/07/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments, see paragraphs 5 and 6, filed 01/29/04, with respect to the objection of claim 1 (paragraph 3) have been fully considered and are persuasive. The objection of claim 1 has been withdrawn.

2. Applicant's arguments, see paragraphs 5 and 6, filed 01/29/04, with respect to the objection of claim 1 (paragraph 4) have been fully considered and are persuasive. The objection of claim 1 has been withdrawn.

3. Applicant's arguments, see paragraphs 7-13, filed 01/29/04, with respect to the rejection of claims 1-3, 9, 10, 13 and 16 under 35 U.S.C. 112 (1) have been fully considered and are persuasive. The rejection of claims 1-3, 9, 10, 13 and 16 has been withdrawn.

4. Applicant's arguments, see paragraphs 37-45, filed 01/29/04, with respect to the rejection of claim 1 as being anticipated by Perrine have been fully considered and are partially persuasive. The rejection of claim 1 has been withdrawn. However, the reasons for withdrawal are based on the amendment to include the subject matter of claim 1. The Examiner disagrees with applicant's arguments. With respect to applicant's paragraph 40, the applicant argues the "away from a shooter" limitation overcomes the cited prior art. However, this limitation will be given little, if any, weight because the applicant has claimed neither a firearm nor a shooter. So, it is quite impossible for gasses (which does not exist because there is no gun nor bullets) to be directed away from a shooter that is not present. Even if such a claim were possible, an

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individual committing suicide with the Perrine gun/muzzle break would surely have gasses dispersed away from him.

5. With respect to paragraphs 42-44, the applicant argues Perrine does not disclose slots having a greater longitudinal dimension than lateral dimension because the slots "are positioned so that the longest portion of these slots are placed generally perpendicular to the orientation of the inner bore and the longer portions are positioned generally perpendicular to the direction of the bore." However, the applicant's attorney has misunderstood the claim language. The claim begins by requiring a body with a generally longitudinal axis. Thereafter, the claim recites elongated openings having a **longitudinal dimension** and a **lateral dimension**. (Emphasis added). However, there is not requirement that the longitudinal dimension of the opening be coincident with the longitudinal axis of the body. It is clear that the openings disclosed in Perrine have longitudinal and lateral dimensions, with the longitudinal dimension greater than the lateral dimension.

6. Applicant's arguments, see paragraphs 46-51, filed 01/29/04, with respect to the rejection of claim 1 as being anticipated by Leffel have been fully considered and are persuasive. The rejection of claim 1 has been withdrawn in view of the amendment.

7. Applicant's arguments, see paragraphs 52-57, filed 01/29/04, with respect to the rejection of claim 1 as being anticipated by Cellini have been fully considered and are partially persuasive. The rejection of claim 1 has been withdrawn because the applicant has required "at least three elongated openings". There does not appear to be any motivation/suggestion to require 3 openings. The Examiner, however, disagrees with

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the applicant's arguments. Specifically, in paragraphs 52-57, the applicant argues that the openings closest to the first end of the Cellini muzzle break are round, not elongated. However, this is not what the claim requires. The claim requires the Examiner to "compare" the position of the elongated openings with the position of "any other aperture". The openings at the second end are clearly radial and when comparing the elongated openings to the openings at the second end, it is clear that the elongated openings are closer to the first end. There is no requirement that there be no holes between the elongated openings and the second end.

8. Applicant's arguments, see paragraphs 58-61, filed 01/29/04, with respect to the rejection of claim 1 as being anticipated by Hull have been fully considered and are partially persuasive. The rejection of claim 1 has been withdrawn because of the additional subject matter added to claim 1. The argument provided in paragraph 60 is not persuasive as explained above.

Applicant's arguments, see paragraphs 62-74, filed 01/29/04, with respect to rejection of claims 3, 9, 10, 13 and 16 as obvious over Mihaita in view of Kleinguenther have been fully considered and are partially persuasive. The rejection of claims 9, 10 and 16 has been withdrawn because of the subject matter added to claim 1 by amendment.

***Allowable Subject Matter***

9. Claim 1, 3, 9, 10, 13, 14, 16 are allowed.

10. The following is an examiner's statement of reasons for allowance: Claim 1 is allowable over U.S. Patents 2322370 issued to Lance and 2165457 issued Cutts. Both Lance and Cutts disclose every limitation of applicants claim 1 with the exception the

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limitation requiring the secondary gas holes to be radial. Radial holes require a constant distance from a center. The secondary holes of Cutts and Lance are elongated. Claim 13 is allowable over Cutts and Lance because the secondary gas holes are not radial nor are the muzzle brakes cylindrical.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited on form PTO-892 are cited as of interest to show similar muzzle brakes.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

  
MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER